REMARKS

Status of claims

Claims 1 and 3-8 have been rejected under 35 U.S.C. sec. 103.

Claims 9 to 21 have been withdrawn from consideration.

Amendment to Claims

Claims 1 and 6 have been amended to delete "means of" language from the claims. This is a purely formal amendment to eliminate potentially ambiguous language from the claims. This amendment does not change the scope of the claims as they have been examined.

Section 103 rejections

Claims 1 to 8 have been rejected as unpatentable over U.S. patent 4,162,908 to Rau, in argued combination with Ruppert (U.S. patent 5,788,730), and in further combination with Edahiro (U.S. patent 4,402,720), and/or Gouskov (U.S. patent 6,535,240) for dependent claims.

Reconsideration of this rejection is respectfully requested.

Claim 1 as revised recites a method for producing a preform from synthetic quartz glass by a plasma-assisted deposition process. The method comprises supplying a hydrogen-free media flow containing a glass starting material and a carrier gas to a multi-nozzle deposition burner, introducing the glass starting material by the deposition burner into a plasma zone wherein the glass starting material is oxidized so as to form SiO_2 particles, and depositing the SiO_2 particles on a deposition surface while being directly vitrified. The media flow is focused

by the deposition burner towards the plasma zone, and the media flow is focused onto the plasma zone by a media nozzle of the deposition burner. The media nozzle tapers in the direction of the plasma zone.

This invention is not suggested by the prior art, and reconsideration of the rejection is respectfully requested.

Rau describes a typical plasma deposition process of the prior art, which is illustrated in figs. 1 and 2 of the reference. The burner has three cylindrical glass tubes 10, 11 and 12, and it emits a plasma flame. There is no detail of the glass tubes shown or described, and, more specifically, no tapering of any tube shown or suggested.

Ruppert shows a central nozzle 6 delivering $SiCl_4$ and oxygen. See col. 5, line 63. The $SiCl_4$ exits the central nozzle 6 through orifice 16 and is converted to SiO_2. See col. 6, lines 4 to 7. As best seen in the figure of Ruppert, the central nozzle has a central bore that is cylindrical in shape with a constant radius over the whole length of the tube and through the orifice 16 at its end. As a consequence, the central nozzle 6 of Ruppert does not focus the media flow, as claim 1 requires.

Both Rao and Ruppert fail to suggest a tapered media nozzle that focuses the media flow onto the plasma zone, and reconsideration of the rejection of claim 1 is therefore respectfully requested.

Edahiro is cited as teaching of a diffuser nozzle, and shows only a cylindrical media nozzle 43 (see Fig. 4). Edahiro does not suggest a tapered media nozzle, and has no bearing on the allowability of claim 1.

Gouskov is cited only for its teaching of use of nitrogen, and shows purely cylindrical,

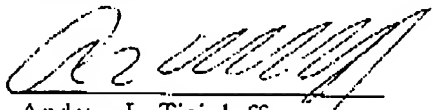
non-tapering nozzles. See e.g. Gouskov, Fig. 2. Gouskov also has no bearing on the allowability of claim 1.

Claim 1 as amended therefore distinguishes over the prior art, and withdrawal of the rejection thereof is respectfully requested. Dependent claims 3 to 8 depend directly or indirectly from claim 1, and therefore are believed to distinguish therewith over the prior art.

All claims having been shown to distinguish over the prior art in structure, function and result, formal allowance is respectfully solicited.

Should any questions arise, the Patent Office is invited to telephone attorney for applicants at 212-490-3285.

Respectfully submitted,



Andrew L. Tiajoloff
Registration No. 31,575

Tiajoloff & Kelly LLP
Chrysler Building, 37th floor
405 Lexington Avenue
New York, NY 10174

tel. 212-490-3285
fax 212-490-3295